

Morphosyntax & semantics – lecture 10

Quantification

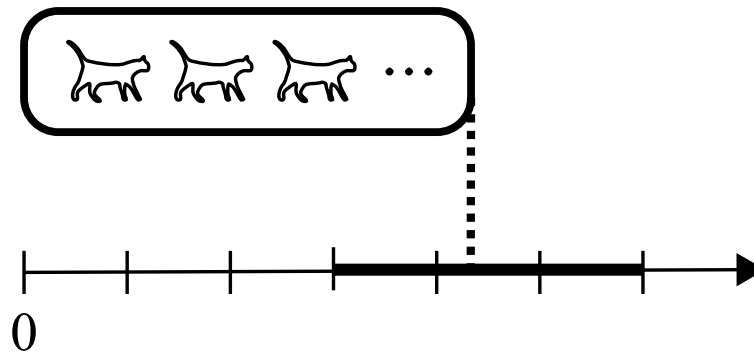
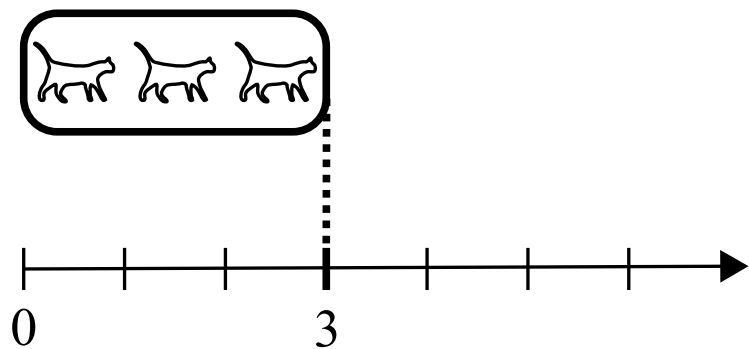
What is quantification?

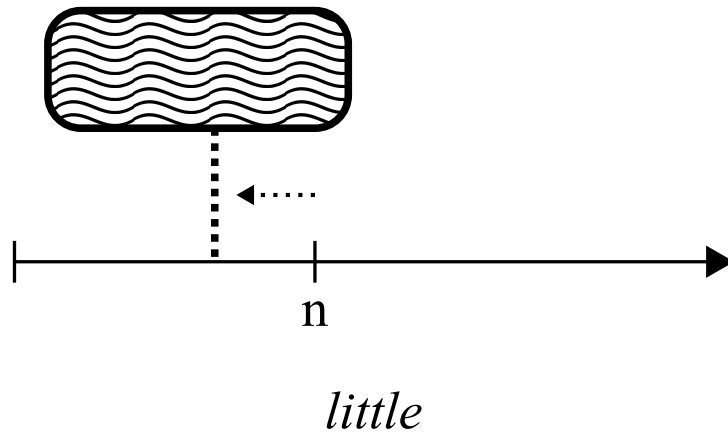
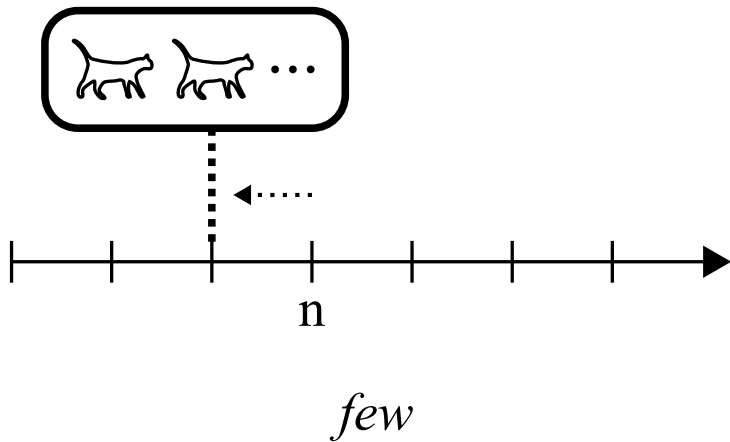
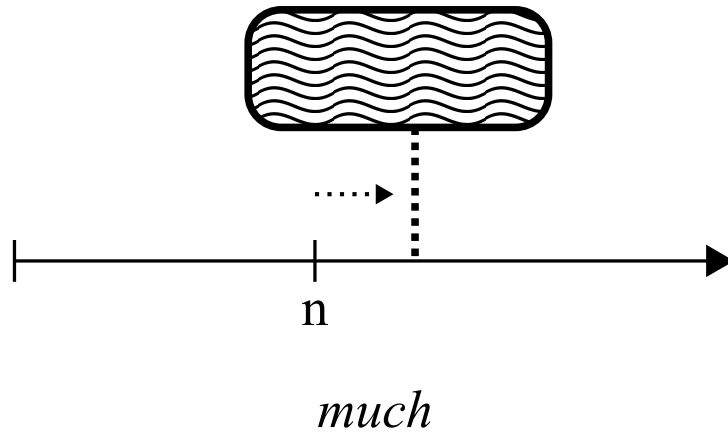
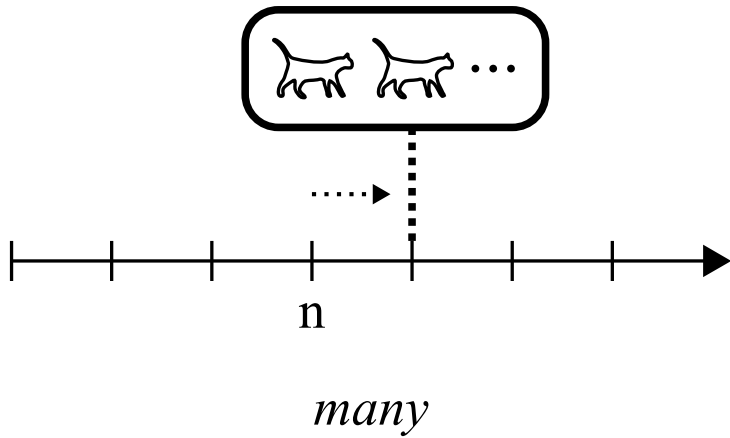
- Quantification involves using a word or a linguistic expression **to specify the amount** of something.
- There are several strategies of quantification depending on
 - the type of mass quantified (plural vs. non-plural),
 - precision (exact vs. approximate),
 - system of reference (relative vs. absolute),
 - scanning (summary vs. sequential),
 - etc.

Absolute quantifiers

- Absolute quantifiers specify the amount in relation to some sort of a **reference scale**.
- One example are cardinal numerals (*one, two, three*, etc.), which relate a plural mass to a counting scale.
- Another example is *several*, which relates a plural mass to a region on a counting scale (rather than to a discrete point).
- Other examples are *much, many, little*, and *few*, which relate plural and non-plural masses to a “standard” or expected amount on a reference scale.

Three vs. several





Proportional relative quantifiers

- Proportional relative quantifiers – like *all*, *most*, *some*, and *no* – specify the amount in relation to a **reference mass**.
 - *All* profiles the entire maximal extensions (ME).
 - *Most* profiles a significant portion of ME.
 - *Some* profiles an unspecified portion of ME.
 - *No* doesn't profile any portion, but still evokes ME as its base.

Proportional relative quantifiers

- Typically, the reference mass is a **maximal extension** (ME) of the mass in question, but it can also be restricted by context.

(1)(a) *All cats benefit from vaccination.*

- *All* = maximal extension

(b) *All cats vaccinated yesterday were female.*

- *All* = contextually restricted extension

Representative instance relative quantifiers

- Representative instance relative quantifiers – like *every*, *each*, and *any* – “pick out” a portion of a reference mass and depict it as a representative member.
 - ***Every*** involves summary scanning of ME.
 - ***Each*** involves sequential scanning of ME.
 - ***Any*** “picks” an element at random.

Representative instance relative quantifiers

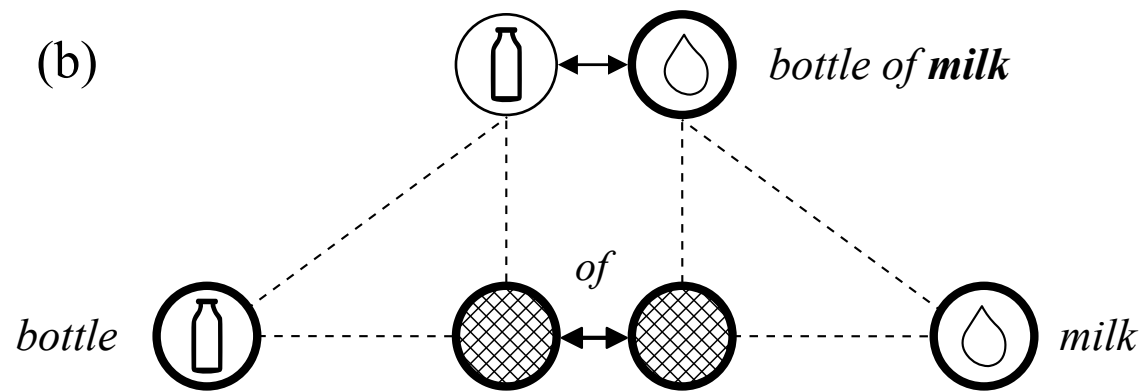
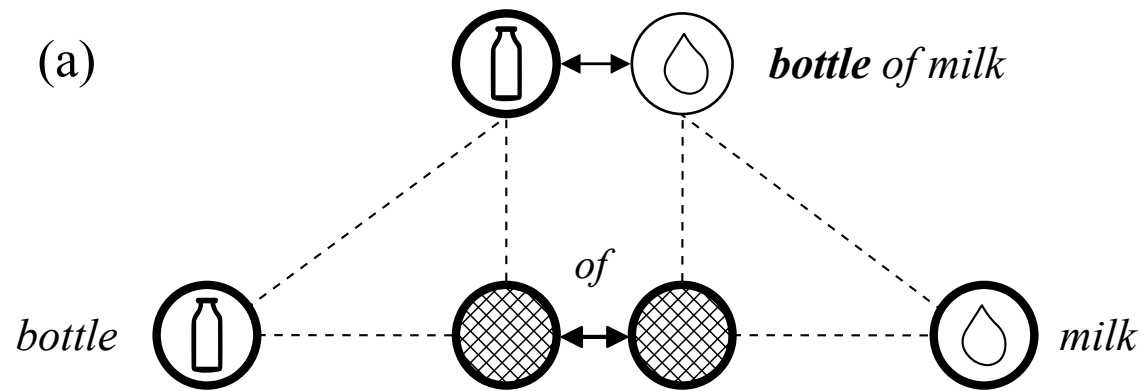
- (2) (a) *{Every/each/any} cat needs to be vaccinated.*
- (b) *The vet vaccinated {every/each/*any} cat one by one.*
- *Each* is most compatible with sequential scanning evoked by *one by one*.
- (c) *{*Every/*each/any} milk is unhealthy for cats.*
- *Any* is most compatible with non-plural masses.
- (d) *Peter doesn't like {*every/*each/any} cat.*
- *Any* is most compatible with negative meanings.

Quantifying expressions

- Amounts of masses can also be specified by various composite expressions, for example:
 - a container: *bottle of milk, jar of marmalade, can of oil*
 - a “standard” unit of measurement: *liter of gasoline, kilogram of flour, meter of copper wire*
 - a “provisional” unit of measurement: *spoonful of sugar, bucketful of ice, handful of sand*
 - a group of animals: *herd of cattle, pack of wolves, swarm of bees*
 - a portion of a substance: *slice of bacon, lump of wax, puff of smoke*
- The **head** of the entire expression is usually the first element, but the construal is quite flexible and context-dependent.

(3)(a) *Jill broke a **bottle**_{head} of milk.*

(b) *Jill drank a bottle of **milk**_{head}.*



References

- Langacker, Ronald W. 2008. *Cognitive Grammar. A Basic Introduction*. New York: Oxford University Press.
- Langacker, Ronald W. 2016. *Nominal Structure in Cognitive Grammar: The Lublin Lectures*. Edited by Adam Głaz, Hubert Kowalewski, and Przemysław Łozowski. Lublin: Maria Curie-Skłodowska University Press.
- Radden, Günter, and René Dirven. 2007. *Cognitive English Grammar*. Amsterdam-Philadelphia: John Benjamins Pub.